
A translation of Moodle into te reo Māori

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Abstract

This paper is an assessment of the te reo Māori translation of the Learning Management System ‘Moodle’ which “is the primary online learning environment [used] at the University of Waikato” (WCEL, 2017), since 2008. Moodle stands for Modular Object-Oriented Dynamic Learning Environment (Pavri, 2004). It has an open code-base that allows users the ability to modify the software to suit their own needs. This particular feature is especially appealing for Māori and Pasifika peoples as it enables the development of the LMS to suit the user’s unique cultural needs (Clayton, 2005, Costello, 2014). For the last 10 years, teaching staff and students of the University of Waikato have used Moodle consistently as an online teaching and learning platform to augment most of the university’s papers and courses. This paper discusses the rationale for the translation of the LMS and gives insight into the process implemented by university staff of Te Ratonga Whakamāori (Māori Translation Service) and the university’s WCEL team (Waikato Centre of E-Learning). This research also gives a detailed account from the perspective of the translators, supplemented with anecdotal student feedback and concluding with a review of results collected from automated Moodle analytical results.

Rationale and student feedback

Since the introduction of Moodle in 2008 the LMS has undergone regular maintenance and scheduled updates by the university’s WCEL team, one of which was the Māori language localisation of Moodle for its resident Waikato users. This project was carried out as a small-scale translation pilot prior to 2009. In mid-2010 plans to translate Moodle completely into te reo Māori between staff of the Ratonga Whakamāori and the WCEL team began. After lengthy discussions and planning, translation work commenced in October 2010.

From the perspective of the teaching staff and students, the rationale for translating Moodle into te reo Māori was simple - create an online virtual learning environment for students that reinforces and encourages them to use te reo Māori. At introductory Level 100, te reo Māori papers are displayed bilingually in Moodle (See *Figure 1*). In doing so, second-language learners are introduced to new terms and concepts outside of the classroom to further enhance their language acquisition of te reo Māori.

Figure 1: Typical Level 100 Reo Māori Moodle paper, displayed bilingually.

By intermediate level 200, *ka rumakina te tauira ki roto i te reo*, the student is immersed in the language. This happens progressively throughout their learning. By this stage, their reo competency has grown to a level where they are able to understand more challenging formulaic expressions in the target language (te reo Māori). Moodle, which they were accustomed to seeing displayed bilingually, is then converted into te reo Māori (See Figure 2).

Figure 2: Typical Level 200 Reo Māori Moodle paper, displayed in te reo Māori.

Immersing users in the target language within Moodle, at this level, supported and complemented the students' language acquisition inside the classroom. This progression of language immersion is a way in which filtering Māori through English is avoided, as some believe it actually "hindered the acquisition of language" (Aikman-Dodd & Rātima, 2014, p. 8). When questioned about their experiences using Moodle, including the online activities, quizzes and language resources, the majority of feedback received from students was positive, and mostly given in te reo Māori.

"He hangarau tino āwhina mō te whakaraupapa i ngā mahi!"

The technology is very useful for organising/sequencing work!

(Te Tohu Paetahi student feedback, 2015)

"Tino pai mo te ako whakataukī, reo ōkawa, kupu whakarite me ngaa kemu whakahahaki..."

It's very good for learning proverbs, formal language, metaphors and revision games...

(Te Tohu Paetahi student feedback, 2015)

Transitioning from English to Māori in Moodle occurs seamlessly at level 200. Students were able to understand Moodle translations of functions, user interface content and commands because they were already familiar with some of these displayed in English in the bilingual version of Moodle at level 100. Even with certain translations they were initially unsure of, they soon grasped the meaning through context and use. The LMS soon became a reliable online learning platform whereby students were able to access information, teaching resources and engage with specific te reo Māori focussed activities relevant to their studies. From the perspective of the teacher, being informed by student feedback has actually prompted changes to teaching delivery.

"Me kaha ake te tuari rauemi whakaako mā Moodle i mua i ngā rangi aromatawai!"

Teaching resources should be shared via Moodle prior to assessment days!

(Te Tohu Paetahi student feedback, 2015).

To address this matter, myself and other members of the Te Tohu Paetahi teaching staff who consistently used Moodle, made a conscious effort to ensure all relevant teaching resources were uploaded prior to assessment days.

Translation process

Following discussions with IT staff of the university's WCEL team, English text strings within the Moodle code were extracted and converted into 130 Excel spreadsheet documents. Due to the scale of the job and the timeframe for its completion, staff decided to isolate only the essential text strings that required translation into te reo Māori. Text

strings deemed essential were those that both the student and the teacher would view whilst using Moodle. As a result only 21 of the total 130 Excel files were isolated, and contained within these approximately 300 text strings with a word count of almost 30,000.

The translation of Moodle came about due to the collaborative efforts of the Te Ratonga Whakamāori staff, the WCEL team and support provided by Dr Te Taka Keegan. An experienced staff member in the Department of Computer Science, Dr Keegan was able to impart his knowledge and expertise in this area. For those of us translating the Moodle strings this proved invaluable, as he had recently returned from 6 months academic leave in America, where he had worked for Google as a visiting academic assisting with the development of the Google Translator Toolkit for te reo Māori. With his guidance, the Te Ratonga Whakamāori translators uploaded the files containing 300 strings of English source text to the Google translator toolkit. The Google Translator Toolkit itself is a free web application designed to allow translators the ability to save and edit translations under their own personal Gmail account. There were numerous advantages for using the Google Translator Toolkit, and one of the most beneficial for our Moodle translation team, was the ability to share documents between translators. This not only enabled our team to work more efficiently at translating the English source text into te reo Māori, but it also negated duplication of work as we were able to access the shared source text documents and co-edit simultaneously in real-time. Working collectively on shared Google documents via the Translator Toolkit meant that, providing we had an internet connection, we could access the translations from anywhere at any time. This proved particularly useful when carrying out verification work that required regular access to check and peer review the work of other colleagues. The freedom to work independently in this way, whilst collectively translating shared documents, really eased our combined workloads. This in turn made the job of translating 30,000 words more manageable.

As lead translator for the project, the task of translating and verifying the required Moodle strings into te reo Māori was left to myself and Awatea Patterson. Awatea, at the time, had just completed the postgraduate Titohu diploma of translating and interpreting, and had proven herself a very skilled translator having contributed to the 2010 Microsoft Local Language Program contract. Over a 6 month period, we worked steadily to translate numerous English commands and user interface terms. At times, a large portion of the English source text seemed very similar and interchangeable with other various text strings we were translating. Maintaining quality assurance of our work meant not only ensuring that the translations were appropriate for display in the LMS, but that they were also distinct enough from other Moodle translations that the user could discern between different meanings. A simple example of this is the Māori translation for the command: 'choose', which is interchangeable at times with 'select' and 'pick'. Using the term *whiriwhiri(a)* for choose actually required us to become economical elsewhere with other vocab. This meant reserving *tīpako(hia)* for select and *kōwhiri(a)* for pick, as each needed to be unique to avoid reduplication and confusion.

Carrying out all the translation work through the Google Translator Toolkit

ensured consistency with the use of specific vocabulary, as the web application would automatically retrieve suggestions from its glossaries as we worked. The more we worked on translating and adding entries, the more the glossaries and translation memories grew, and so too did the application's ability to translate source text into the target language (Māori). If unable to fully translate, it would often give partial translations or highlight specific vocabulary it recognised and make suggestions for us to consider. Working alongside Awatea gave me helpful insight into the perspective of the student. As a teacher, sometimes my translations, although grammatically correct, did not always convey the intended meaning as effectively as Awatea's translations. When verifying each other's work daily, I would get the opportunity to read her te reo Māori translations, which prompted me at times to reconsider my own. It was helpful to take a step back, to view her work and really consider why she chose to translate the English source text the way she did. She was able to see the translations through the eyes of both the student and translator. Occasionally, having viewed her translations I would change my own to suit. An example of this was the word 'flag' that I had translated as 'haki', which can also be perceived to mean 'cheque' that in certain contexts has monetary connotations associated with it. Awatea chose to translate 'flag' with 'kara'. This word also worked particularly well when joined with the verb 'wete' as a compound to convey the antonym 'un-flag' = 'wete-kara'.

Click to un-flag this question = *Pāwhiritia kia wete-kara i tēnei pātai*

The most obvious translations were not always the best suited for the context. Peer reviewing our work in this manner provided an alternative vantage point with which to consider how others may perceive the translations. This served as a form of quality assurance for the project.

Moodle results

REOM201-17A was the first te reo Māori paper completely taught and assessed online via the LMS Moodle. Tracking student engagement within Moodle merely involved checking the enrolled users' details to see when they had last gained access. In this paper, specific te reo Māori focused assessments were prescribed through mahi kāinga (homework), kōrero-ā-waha (oral presentations) and whakamātautau (tests). Each activity generated access times and details of the duration a student spent engaged with each activity, and this was able to be tracked through users attempts. Although every individual learner inevitably possesses different strengths and weaknesses, what was obvious from the results of the assessment which followed, was a definite pattern that emerged correlating with grades awarded, the duration a student spent on the assessment and the times they logged in for their attempt (See *Figure 3*). Highlighted in the graph below are the results of the Mahi Kāinga 1 assessment completed by 23 of the 27 enrolled REOM201-17A cohort. The 2 red students that received 5 - 7.25 marks failed, and did not achieve a pass grade. Both logged in to attempt this assessment during the final 2 hours. The 17 orange students that scored in

the middle range, between 9 - 14 marks, logged in for their attempts 24 hours prior to the assessment closing. The 4 green students that achieved the highest marks spent the most time fulfilling the required tasks for this assessment, and had logged in for their attempts 48 hours in advance.

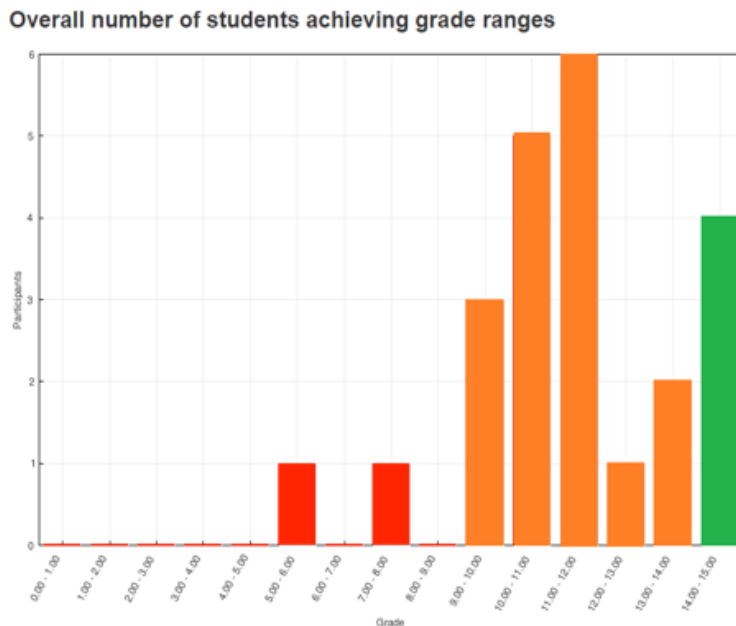


Figure 3: REOM201-17A Mahi Kāinga 1 results

Conclusion

How has the translation of Moodle been beneficial to the teaching of te reo Māori at Waikato University? By Level 200, students are encouraged to communicate in te reo Māori despite their varying abilities and degree of reo competency. The immersion approach is a well-known philosophy embedded within our teaching practice, and with the translation of Moodle, teaching staff can provide students with yet another domain in their lives where they are compelled to use their reo. This stands to enhance the students' learning outside of the classroom, giving them a virtual learning environment that further reinforces their language acquisition. "...[V]irtual worlds add much more than visual and auditory media, they provide instructors and students greater choices for collaboration, learner autonomy, creativity, and experimentation..." (Henderson, Huang, Grant, & Henderson, 2009, pp. 465-466).

Outside of the classroom, the translation of Moodle provides for a blended style of teaching that gives students the autonomy to learn te reo Māori at their convenience. They gain the flexibility to learn independently and set their own pace conducive to their personal needs. With Moodle software being continually developed, there are ongoing opportunities to further customise and enhance the student's virtual learning environment with translations.

References

- Aikman-Dodd, P. J., & Rātima, M. T. (2014). *Can communicative language teaching help? Intern report for Ngā Pae o te Māramatanga Summer Internship*. Retrieved from <http://www.maramatanga.co.nz/sites/default/files/project-reports/14INT02%20-%20COMMUNICATIVE%20LANGUAGE%20TEACHING%20Internship%20Report.pdf>
- Clayton, J. (2005). Free and open source software solutions: A New Zealand experience. Paper presented at the *TCC 2005: Looking Back Towards the Future*, Honolulu, HI.
- Costello, E. (2014). Opening up to open source: looking at how Moodle was adopted in higher education. *Open Learning: The Journal of Open, Distance and e-Learning*, 28, 187-200.
- Henderson, H., Huang, H., Grant, S., & Henderson, L. (2009). Language acquisition in Second Life: Improving selfefficacy. *Proceedings of the Australasian Society for Computers in Learning in Tertiary Education (ASCILITE) Conference* (pp. 464 - 474). Auckland, New Zealand.
- Pavri, A. C. (2004). *Open-source learning management with Moodle*. Available linuxjournal.com.
- WCEL. (2017). *elearning Resources: Moodle*. Retrieved from <https://www.waikato.ac.nz/elearning-resources/moodle>